United States Department of the Interior
FISH AND WILDLIFE SERVICE
UTAH FIELD OFFICE
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WEST VALLEY CITY, UTAH 84119

October 26, 2009

In Reply Refer To
FWS/R6
ES/UT
07-FA-0002

Dave Grierson
Utah Department of Natural Resources
Division of Forestry, Fire and State Lands
1594 West North Temple, Suite 3520
Salt Lake City, Utah 84114 -5703

RE: Utah Lake Bridge Crossing

Dear Mr. Grierson:

We have reviewed the Utah Lake Crossing project nomination and description that the Division of Forestry, Fire and State Lands (FFSL) distributed for public review. We are generally concerned with project effects to water quality, and fish and migratory bird habitat. More specifically, we believe the project proponent should closely evaluate potential effects to June sucker (*Chasmistes liorus*), which is protected under the Federal Endangered Species Act and for which there exists a multi-agency cooperative effort for recovery. We have outlined our recommendations in the following paragraphs.

Water Quality

Water quality in Utah Lake does not meet state standards for nutrient loading (phosphorous) and total dissolved solids (TDS). Consequently, Utah Lake only partially supports beneficial uses for its warm water fishery because of total phosphorous levels (TP). The Utah Department of Environmental Quality (UDEQ) set a water quality standard of 0.05 mg/L which corresponds to approximately 142,000 kg/year, yet current phosphorous levels exceed that standard by more than 90 percent. According to the Utah Lake Crossing project description, the proposed bridge will contribute 19 kg/year of phosphorous from sediment attached to vehicles. This additional contribution represents a 1.3 percent increase in phosphorous levels above the state standard. We do not agree that this increase is a minor cumulative impact of the proposed project. In light of existing high levels and likely future growth along the northern and western shores of Utah Lake, it contributes to cumulatively large phosphorous loading.

We are aware that UDEQ and the U.S. Environmental Protection Agency (EPA) are currently in discussions regarding a site-specific standard for TDS. Concentrations in Utah Lake are measured according to a proposed standard for irrigation fields. There is no standard for fisheries or ecosystem health. De-icing salts applied to the bridge during winter storms are likely to move into Utah Lake and affect TDS concentrations. We recommend that FFSL prohibit salts for de-icing on the bridge as a condition of its permit. Alternatively, Utah Lake Crossing, Inc. could close the bridge to traffic during winter storms.

Utah Lake Crossing, Inc. does not provide sufficient information for us to adequately assess how an increase in TSS by 4,800 kg/year will affect Utah Lake water quality. Therefore, it is unclear whether this increase represents a minor cumulative impact of the proposed project as described in the project description. Regardless, we agree that Utah Lake Crossing, Inc. can minimize TSS and TP loading by implementing sediment capture structures, increased street sweeping, and assisting in the treatment of alternative source input (such as agricultural runoff or wastewater facilities). Utah Lake Crossing, Inc. should also implement measures to reduce water pollution from oil and gas, as well as trash. We recommend that FFSL establish short and long-term binding minimization measures for bridge runoff and include them as conditions of an approved lease. Our office can assist in the review of these conditions.

Hazardous constituents (metals, PAHs, some organics) may be released from lakebed sediment during bridge construction with negative impacts to aquatic wildlife including June sucker. We recommend that prior to construction, Utah Lake Crossing, Inc. conduct sediment sampling where activities may disturb lakebed sediment. We can assist Utah Lake Crossing, Inc. with a sampling protocol and results analysis.

Hazardous Materials Transport and Pipelines

Hazardous material transport across Utah Lake is likely to result in accidental spills. We recommend that vehicles carrying hazardous materials travel east/west by utilizing alternative transportation corridors around Utah Lake. These vehicles should be prohibited from using the Utah Lake crossing.

We are aware that utilities may use the bridge structure to route pipelines. Pipelines are subject to ruptures and spills. We recommend that utilities implement measures such as pigging and shut-off valves on pipelines to minimize the risk of contamination events.

Long Term Maintenance Assurances

Post-construction, there may be little funding and/or interest in maintaining long-term minimization measures relative to bridge runoff and water quality. We are aware that toll bridges often fail to meet revenue projections in the first year and that they can be poor performers. For example, tolling projections for the Mountainview Corridor indicated a failure to fund the project and met significant local opposition. We believe it is critical that Utah Lake Crossing, Inc. name and ensure funding for the parties responsible for post-construction maintenance through the life of the bridge. We recommend that Utah FFSL require these measures as conditions of lease approval.

Migratory Bird Habitat

The Service has identified "Birds of Conservation Concern" for the Great Basin region. These non-game migratory birds are likely to become candidates for listing under the Endangered Species Act without proactive conservation measures to help sustain their populations. Many of the Great Basin birds use Utah Lake at some point in their life-cycle. The Utah Lake crossing will create additional human disturbance, noise, and light pollution which will affect bird behavior, migration, and habitat use patterns. Birds may also collide with vehicles. To minimize these impacts, we recommend that Utah Lake Crossing, Inc. utilize low LED lighting on the bridge and limit vehicle speed.

June Sucker

The Service listed the June sucker as an endangered species with critical habitat in 1986. It is protected under the Endangered Species Act and is the impetus for establishment of the June Sucker Recovery Implementation Program (JSRIP). The program is an effort funded in part by the Utah Department of Natural Resources in partnership with federal agencies and local organizations. It exists to avoid the potential extinction of the June sucker and assists in the recovery of the species.

The June sucker is subject to a variety of threats including urban growth, land use practices, and municipal and industrial discharge, all of which impair water quality and severely damage the June sucker's only indigenous habitat in Utah Lake. Additionally, nonnative fish in Utah Lake threaten the June sucker through predation, competitive interactions, and habitat alteration. The Utah Lake crossing may indirectly affect June sucker through changes to water quality and fish habitat, and directly affect the species as the result of construction impacts.

Changes to Water Quality

As stated previously, current TP levels in Utah Lake exceed the state water quality standard by 90 percent. Therefore, we do not believe that any increase in phosphorous levels above the State recommended standard represents a minimal impact to water quality in Utah Lake. Elevated levels of TP are a limiting factor in the re-establishment of aquatic macrophytes which provide refuge to June sucker.

Fish Habitat and Predators

Carp represent 91% of the biomass in Utah Lake and alter habitat necessary for the survival of June sucker. In order to encourage growth of aquatic macrophytes and increase refuge habitat for young June suckers, JSRIP will invest $1.3 million in carp removal in 2010.

Predatory fish in Utah Lake, including carp, threaten June sucker recovery. Utah Lake Crossing, Inc. proposes a project that will create shading and hard in-water structures (bridge footings). These components of the project will create additional predatory fish habitat, increasing the pressure exerted on June sucker

June sucker Mortality

Utah Lake Crossing, Inc. provided preliminary information to FFFS regarding the potential future impacts associated with the proposed bridge crossing across Utah Lake. Under Section 6.2, the proponent disclosed the potential for direct mortality to fish (including June sucker) in Utah Lake during construction of the bridge. Specifically, impacts could occur from installation of bridge pilings, displacement or physical damage resulting from noise and vibration associated with driving the piles, or through behavior changes from stress. Once the bridge is in operation, hazardous material spills may also result in June sucker mortality.

Under Section 10 of the Endangered Species Act, the U.S. Fish and Wildlife Service authorizes incidental take permits when non-Federal activities result in "take" of threatened or endangered wildlife. "Take" is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect any threatened or endangered species. Anyone who believes that his otherwise-lawful activities will result in the "incidental take" of a listed wildlife species needs a permit from our agency. For more information, visit http://www.fws.gov/endangered/permits/index.html.

For non-federal activities, a habitat conservation plan (HCP) must accompany an application for an incidental take permit in order to ensure there is adequate impact minimization/mitigation under the authorization. Harm may include significant habitat modification where an individual or action actually kills or injures a listed species through impairment of essential behavior (e.g. spawning). Ultimately, we believe it is in the best interest of Utah Lake Crossing, Inc. to design its project and activities to avoid June sucker mortality.

Stiff penalties may be imposed for violations of the Endangered Species Act. In order to avoid these violations, we recommend that Utah Lake Crossing, Inc. develop an HCP and obtain an incidental take permit.

Induced Growth

Impacts to fish and wildlife in and around Utah Lake are not limited to bridge construction and operation. The bridge will create additional access to the west side of Utah Lake and there will likely be an increase in residential and commercial development. We are concerned about the pressure on fish and wildlife created by this additional development. The JSRIP has expended $48 million to date on projects to recover the June sucker. Species recovery depends not only on these projects, but on wise decisions relative to new development.

If FFSL permits this project, the Service would like to work with Utah Lake Crossing, Inc. to develop long term mitigation measures that will compensate for the effects of induced growth. The protection, restoration, and re-establishment of wetlands around Utah Lake is critical to water quality. Undisturbed shoreline habitat is critical to the recovery of June sucker. Utah Lake Crossing could mitigate the long term effects of its project by creating a conservation easement on sensitive shoreline or wetlands that are otherwise subject to development.

Consideration of Alternatives

The Service has outlined its concerns regarding the proposed Utah Lake crossing project. Ultimately, FFSL could avoid the immediate and long-term effects of a bridge across Utah Lake by choosing to utilize available and practical alternatives. The Utah Department of Transportation and local municipalities have invested significant funds in the development and improvement of transportation options in Utah County. A stated purpose of the Mountain View Corridor project is to alleviate east-west congestion at the north end of Utah Lake. Residents of Eagle Mountain and Saratoga Springs can easily access I-15 using Pioneer Crossing and would in fact travel fewer miles to reach I-15 than via the proposed bridge. Therefore, we disagree that residential and commercial growth on the west side of Utah Lake is constrained by lack of access. If residents perceive a lack of access, it could be remedied with completion of Mountain View Corridor, education efforts, and increased public transportation options.

We appreciate the opportunity to comment on the project nomination for the Utah Lake Crossing. We are available for further discussion about our recommendations. If we can be of further assistance, please contact Amy Defreese, Ecologist at (801) 975-3330 ext. 134, or email amy_defreese@fws.gov.

Sincerely,

Larry Crist
Utah Field Supervisor

cc: EPA – Denver (Attn: Dick Clark)
UDWR – JSRIP Salt Lake City (Attn: Reed Harris)
UDWR – Salt Lake City (Attn: Rick Larsen)
FWS – Regional Office, Denver (Attn: Tim Modde)
COE – Bountiful (Attn: Jason Gipson)

bcc: Project File
Reading File

Defreese/tsb:10/26/09
File: Utah/DNR/FFS/NEPA
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